

CLEAN VERSION OF THE ENTIRE SET OF CLAIMS

1 1. (Cancelled)

1 2. (Twice Amended) The method of claim 1, further comprising selecting said
2 memory banks for access by one of the first and second processors.

1 3. (Twice Amended) A method for allocating real-time audio data from a
2 plurality of audio channels in a system having a first processor and a second processor, the
3 method comprising:

4 providing a plurality of memory banks of semiconductor memory devices, each
5 memory bank being accessible to the first and second processors for operations selected
6 from the group comprising read and write operations, the second plurality of memory
7 banks includes two memory banks, and

8 storing subsets of said audio data in the second plurality of memory banks, the
9 subsets corresponding to different groups of audio channels.

1 3. 4. The method of claim 1 wherein one subset of said audio data corresponds to
2 even-numbered audio channels and one other subset of said audio data corresponds to odd-
3 numbered audio channels.

1 5. (Cancelled)

1 6. (Amended) A system having first and second buses for processing real-time
2 audio data from a plurality of audio channels, the system comprising:

3 a first processor and a second processor coupled to said first and second busses,
4 respectively;

5 a plurality of memory banks of semiconductor memory devices coupled to said first
6 and second buses for storing said audio data, said plurality of memory banks being
7 accessible to the first and second processors for operations selected from the group
8 comprising read and write operations, said plurality of memory banks storing subsets of
9 audio data, said subsets corresponding to different groups of audio channels; and

10 a plurality of selectors coupled said first and second buses to select said memory
11 banks for access by one of said first and second processors.

1 8. (Amended) The system of claim 6 wherein the plurality of selectors include
2 a plurality of address multiplexers and data transceivers.

1 9. (Amended) The system of claim 8 wherein one subset of said audio data
2 corresponds to even-numbered audio channels and one other subset of said audio data
3 corresponds to odd-numbered audio channels.

1 10. (Twice Amended) The system of claim 6, wherein the memory banks
2 include dynamic random access memories.

1 11. (Amended) The method of claim 1, wherein storing further comprises
2 interleaving the subsets of data.

1 12. (Amended) The method of claim 11, wherein the subsets are stored in the
2 memory banks in an interleaving manner.

1 13. (Amended) The method of claim 12, wherein storing comprises storing one
2 of the subsets of audio data in one of the memory banks, said method further comprising
3 reading stored audio data from a second of the memory banks.

1 14. (Amended) The method of claim 13, wherein the first processor performs a
2 read operation on a first memory bank of the plurality of memory banks and the second
3 processor performs a write operation on a second memory bank of the plurality of memory
4 banks.

1 15. (Amended) The system of claim 6, wherein subsets of audio data are stored
2 in one of the memory banks and stored audio data is read from a second memory bank of
3 the memory banks.

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(Amended) The system of claim 6, wherein the first processor performs a
read operation on a first memory bank of the plurality of memory banks and the second
processor performs a write operation on a second memory bank of the plurality of memory
banks.

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